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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,344	12/17/2001	Hirokazu Miwa	0941.66061	7994

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EXAMINER
LAO, LUN YI

ART UNIT	PAPER NUMBER
2673	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/023,344	MIWA ET AL.	
	Examiner	Art Unit	
	Lao Y Lun	2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 March 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) *2* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 5-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Murade(6,531,996).

As to claims 5-6, Murade teach an LCD display comprising display part display an image in accordance with image display data supplied through data signal lines(S1-S6); and driving part driving each data signal of the data signal lines by supplying a plurality of sets of same image data(V1D1-V1D6) simultaneously so as to increase the driving capability and the plurality of sets of same image display data are supplied from the same side of data lines(S1-S6)(see figures 14-15; column 28, lines 53-68 and column 29, lines 1-20).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al in view of Maekawa et al(5,686,936).

As to claims 1 and 3, Bennett et al teach a liquid crystal display comprising: a display part displaying an image in accordance with image data supplied through data signal lines(C1-C9); and a driving part driving said data signal lines(28, 32) driving each data signal line(C1-C9) by using a plurality of driving devices(D3, D4, 28, 32) together for simultaneously so as to increase the driving capability(see figures 1-2, 6; column 2, lines 16-27; column 3, lines 35-39; column 4, lines 13-35; column 5, lines 16-68; column 6, lines 1-3 and column 10, lines 6-33).

Bennett et al fail to disclose the plurality of driving devices disposed on the same side of the display signal line.

Maekawa et al teach an LCD display for disposing a plurality of driving devices(2, 5) on the same side of the display signal line(column line)(see figure 1 and column 4, lines 46-50). It would have been obvious to have modified Bennett et al with

the teaching of Maekawa et al, since Maekawa et al have disclosed the driving devices could be mounted on opposite side or same side(see column 4, lines 46-50) and the driving devices mounted on the same side of data lines would be more easy for assembly, repair and replace.

As to claim 3, Bennett et al teach the number of the driving devices used for driving each data signal line is controlled in accordance with a particular type of display part(large size and fast response LCD display)(see figures 2, 6 and column 2, lines 7-27).

5. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imamura(6,091,392) in view of Maekawa et al(5,686,936).

As to claims 1 and 3, Imamura teaches a liquid crystal display having a plurality of data signal lines(column lines) and a driving part(5) driving data signal lines(column lines) by supplying a plurality of sets of same image display data to each data line simultaneously so as to increase the driving capability(see figures 1, 3; column 2, lines 26-29 and lines 59-68; and column 3, lines 1-8).

Maekawa et al teach an LCD display for disposing a plurality of driving devices(2, 5) on the same side of the display signal line(column line)(see figure 1 and column 4, lines 46-50). It would have been obvious to have modified Imamura with the teaching of Maekawa et al, since Maekawa et al have disclosed the driving devices could be mounted on opposite side or same side(see column 4, lines 46-50) and the driving devices mounted on the same side of data lines would be more easy for assembly, repair and replace.

As to claim 3, Imamura teaches the number of the driving devices used for driving each data signal line is controlled in accordance with a particular type of display part(resolution640X400 or color LCD display with narrow electrode pitches)(see figure 1; column 1, lines 34-36 and column 4, lines 59-61).

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett et al in view of Mackawa et al and Masuda et al or Imamura in view of Mackawa et al and Masuda et al(5,801,672).

Bennett et al as modified or Imamura as modified fail to disclose a wiring part provided on a substrate on the display part is formed.

Masuda et al teach an LCD display comprising a wiring part(301a, 301b) integrated with a display part(see figures 2, 9 and column 1, lines 33-39). It would have been obvious to have modified Bennett et al as modified or Imamura as modified with the teaching of Masuda et al, so as to eliminate cumbersome interconnection between the display panel and the drive circuit section.

Response to Arguments

7. Applicant's arguments with respect to claims 1 and 3-5 have been considered but are moot in view of the new ground(s) of rejection.

Applicants argue that Maekawa does not teach a plural drivers provide the same types of signals to the data signal lines so as to increase driving capability on pages 5-6. However, Maekawa is not cited for teaching such feature, Bennett et al and

Imamura do(see Bennett's figures 2, 4, 6 and column 10, lines 33 and Imamura's figure 1 and column 2, lines 59-68).

In response to applicant's argument that Bannett and Maekawa or Imamura and Maekawa nonanalogous references on page 6, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, those reference all teach an LCD display having two signal drivers(column drivers).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, The motivation to combine Maekawa et al has been given by the Maekawa(see column 4, lines 46-49) the to have two driver in the same side lines would be more easy for assembly, repair and replace, which has been recognized the person skill in the art.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tomita et al(6,265,889) teach an LCD display having video data(A, B) at the same side of data lines.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lun-yi Lao whose telephone number is 571-272-7671. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 14, 2005

Lun-yi Lao

Lun-yi Lao
Primary Examiner